

## CLAIMS:

1. Control circuit (2) for controlling an electrical signal (4) over a load (6) such as a deflection circuit of a Cathode Ray Tube, comprising a first transistor (8) for switching the electrical signal (4) over the load (6), wherein the load (6) is coupled to a collector (10) and an emitter (12) of the first transistor (8), and wherein the control circuit (2) also  
5 comprises a resonance circuit (14) which is coupled to a basis (16) and the emitter (12) of the first transistor (8) for driving the first transistor (8), a power supply (18) which is coupled to the resonance circuit (14) for driving the resonance circuit (14), a pulse generating circuit (20) which is coupled to the power supply (18) and the resonance circuit (14), and a processing unit (24) with a memory unit (26), characterised in that, the memory unit (26) is  
10 arranged to be loaded with control information concerning predetermined states of the load (6) and corresponding predetermined optimal control adjustments of the power supply (18) and/or the pulse generating circuit (20), wherein the processing unit (24) is arranged for optimally controlling the electrical signal (4) by controlling the first transistor (8) via the power supply (18) and/or via the pulse generating circuit (20) for an actual state of the load  
15 (6) on the basis of the control information loaded in the memory unit (26).
2. Control circuit (2) for controlling an electrical signal (4) over a load (6) according to claim 1, characterised in that, the pulse generating circuit (20) is arranged for generating a pulse signal (22) for switching the first transistor (8) via the resonance circuit  
20 (14).
3. Control circuit (2) for controlling an electrical signal (4) over a load (6) according to one of the preceding claims, characterised in that, the processing unit (24) is coupled to the power supply (18) for controlling the power supply (18).  
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4. Control circuit (2) for controlling an electrical signal (4) over a load (6) according to one of the preceding claims, characterised in that the processing unit (24) is coupled to the pulse generating circuit (20) for controlling the pulse generating circuit (20),

wherein the pulse generating circuit (20) is arranged for pulse-width modulation of the pulse signal (22).

5. Control circuit (2) for controlling an electrical signal (4) over a load (6)  
5 according to one of the preceding claims, characterised in that, the pulse generating circuit (20) comprises a second transistor (42), a pulse generator (44) which is coupled to a basis and an emitter of the second transistor (42), and a transformer (46), wherein a first coil (48) of the transformer (46) is coupled to the power supply (18) and a collector of the second transistor (42), and wherein a second coil (50) of the transformer (46) is coupled to the resonance  
10 circuit (14).

6. Control circuit (2) for controlling an electrical signal (4) over a load (6)  
according to one of the preceding claims, characterised in that, the resonance circuit (14) is an LCR-circuit.  
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7. Control circuit (2) for controlling an electrical signal (4) over a load (6)  
according to one of the preceding claims, characterised in that, the processing unit (24) is a microprocessor and that the memory unit (26) is a digital EEPROM.

20 8. Method for adjusting a control circuit (2) for controlling an electrical signal (4) over a load (6) according to one of the claims 1-7, characterised in that, the method at least comprises the steps of:

coupling the basis (16) and the emitter (12) of the first transistor (8) with factory measurement and control equipment;

25 coupling the processing unit (24) with factory measurement and control equipment;

adjusting the load (6) in an actual state of the load (6), wherein the actual state of the load (6) is one of the predetermined states of the load (6);

adjusting the power supply (18) of the control circuit (2) in a number of  
30 subsequent control adjustments of the power supply (18) for the actual state of the load (6) with the factory measurement and control equipment, wherein the factory measurement and control equipment adjusts the processing unit (24), and wherein the processing unit (24) controls the power supply (18) in a number of control adjustments of the power supply (18);

measuring voltage response characteristics with the basis (16) and the emitter (12) of the first transistor (8) for each of the number of control adjustments of the power supply (18) for the actual state of the load (6) with the factory measurement and control equipment;

5                    selecting an optimal control adjustment from the number of control adjustments of the power supply (18) for the actual state of the load (6) on the basis of the measured voltage response characteristics with the factory measurement and control equipment;

10                   storing control information relating to the optimal control adjustment for the actual state of the load (6) in the memory unit (26) of the control circuit (2) with the factory measurement and control equipment.